

DOCKET NO.: MSFT-2555/304784.01
Application No.: 10/656,384
Office Action Dated: November 26, 2008

PATENT

REMARKS

There are 25 pending claims 2, 4-26, and 34. Claims 1, 3, and 27-33 were previously canceled. Claims 10, 18, and 34 are independent. All previous rejections were withdrawn in favor of new grounds citing new references. Claims 16 and 17 are objected to as allegedly being duplicate claims. Claims 2, 4-26, and 34 are rejected under 35 U.S.C. § 103. Applicants respectfully traverse. Reconsideration in view of the following remarks is respectfully requested.

Telephone Conversation With Examiner

Examiner Patel is thanked for the telephone conversation conducted on February 10, 2009. Claimed subject matter was discussed. Cited art was discussed. Differences between the claimed subject matter and the cited art were discussed. No agreements were reached.

Objection to Claims 16 and 17 as Duplicate Claims

Claims 16 and 17 are objected to as being duplicative. Applicants respectfully traverse.

Applicants thank the Examiner for pointing out a typographical error that has persisted in each of four previous replies. As illustrated in the Published Application, i.e., Publication No. 2005/0055564, original claim 16 is different from original claim 17. Specifically, original claim 16 reads “the loader instantiating the security agent separately from the object model” while original claim 17 reads “the loader instantiating the security agent as part of the object model.” Neither of the original claims 16 or 17 has been amended. As such, no amendment was necessary to correct the typographical error in reciting these claims. Accordingly, Applicants respectfully request withdrawal of the objection.

Rejection of Claims 2, 4-26 and 34 under 35 U.S.C. § 103

In response to the previous reply, the Examiner withdrew previous grounds of rejection and asserted new grounds of rejection with new citations and arguments. More specifically, claims 2-26

and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over various three and four reference combinations of a total of six references. Each independent claim and most dependent claims are rejected by the combination of three references: (1) U.S. Patent Application Publication No. 2002/0099837, by Oe *et al.* (hereinafter referred to as “Oe”); (2) U.S. Patent No. 6,802,006, issued to Bodrov (hereinafter referred to as “Bodrov”); and (3) U.S. Patent No. 7,181,603, issued to Rothrock *et al.* (hereinafter referred to as “Rothrock”); while other dependent claims are rejected by the foregoing combination of three references in addition to one of the following three additional references: (4) U.S. Patent No. 5,974,549 issued to Golan (hereinafter referred to as “Golan”); (5) U.S. Patent No. 6,980,308 issued to Masaki *et al.* (hereinafter referred to as “Masaki”); and (6) U.S. Patent Application Publication No. 2002/0138727, by Dutta *et al.* (hereinafter referred to as “Dutta”). (Office Action, pp. 2-9). Applicants respectfully traverse all rejections.

First, it is respectfully submitted that the cited art fails to teach or suggest the claimed subject matter. It is believed that claim limitations have been overlooked. At least one fundamental difference (patentable distinction) between the claims and the cited art is the fact that all independent claims (and therefore all claims) recite an executable file having three executable components: (1) image file source, (2) security source, and (3) loader. See, e.g., FIG. 4 and Abstract. Thus, an image file is integrated with its security and loader (which only permits applications to interact with the security) so that protection accompanies the file wherever it goes.

In contrast, Oe pertains to managing access to otherwise unprotected and independent resources (e.g. files 2011 that are not integrated with a loader or security) only when an independent resource management program (RMP) 203 is running to monitor and respond to certain OS API usage between user application 202 and OS 201. This intentional lack of integration of RMP 203 with the files 2011 teaches away from the claimed subject matter. See, e.g., Oe, ¶ 0007 (“It is an object of the present invention to . . . restrict operations to resources . . . without revising the OS or . . . application”); see also ¶ 0352; FIG. 2 (RMP 203 independent of resources (e.g. files) 2011, OS 201 and application 202).

Oe's focus is different than the claimed subject matter. Oe focuses on controlling general access to a computer's resources (file, storage device, display screen, etc.) based on a user's general access rights, which is why Oe's security (i.e. RMP 203, SCM 19) must be independent of (i.e. not integrated with) particular files in order to function as intended to protect an array of resources. See, e.g., Oe, ¶¶ 0001, 0007. Oe's focus is clearly more general than the claimed subject matter, which focuses on protection of particular files by obfuscation and access control, guaranteeing that by integrating loader and security with the particular file.

Any attempt to modify Oe to integrate RMP 203/SCM 19 with files would not only ignore its teaching away, but would also change Oe's principle of operation if not render Oe inoperable for its intended purpose.

In Oe's system, if RMP 203 is not running on a computer where a file 2011 is located then the file 2011 is not protected. In contrast to Oe, the claimed subject matter joins the loader, security, and image source in the same executable file so that the image source is always protected no matter where it is located.

The Office Action realizes this difference to some degree by admitting that Oe fails to teach it. Instead, the Office Action vaguely, summarily, and incorrectly alleges Bodrov does. Applicants will first point out that Bodrov does not even teach what it is alleged to teach and then Applicants set forth the law that prevents attempts to modify Oe to try to read on the claimed subject matter.

The Office Action argues that Bodrov teaches the claimed "compiled executable file having an executable image file source, an executable security source, and an executable loader." The Office Action cites FIGS. 2, 3 and col. 3, l. 43 – col. 4, l. 15 of Bodrov as support for its argument. However, Bodrov clearly does not teach what the Office Action argues it does. Since FIG. 3 only illustrates executable image 100, which is the file validated by validator, the only relevant portion of Bodrov is FIG. 2 and discussion of it. Here is what Bodrov has to say:

FIG. 2 is a block diagram illustrating a validator 204. In one embodiment of the invention, the validator 204 is an executable image, similar in format to the

executable image 100. In another embodiment of the invention, the validator 204 is integrated with the executable image 100. In yet another embodiment of the invention, the validator 204 is integrated with a program loader 208. One function of the program loader 208 is to copy an executable image 100 from the storage device 105 (FIG. 1) to the memory 108 and to bind the code and data pointers to an appropriate address prior to the execution of the executable image 100 [to "fix-up" pointers to "connect[] the executable image 100 to another executable image [200]"].

Bodrov, col. 3, ll. 43-53; col. 4, ll. 63-65.

The relocation table 316 identifies the position of each of the portions of the code section 304 that are in need of "fixing-up" upon the loading of the executable image 100. The term fixing-up as used herein refers to the process of modifying the executable image 100 in memory such that any unresolved pointers reference the appropriate data and/or code locations. After a pointer has been fixed-up by the program loader 208, it is said to be "bound" to a selected address.

Bodrov, col. 5, ll. 6-14.

First, Bodrov only states that validator (authenticator) 204 may be integrated with executable image 100 or with program loader 208. Bodrov does not say that all three are integrated or that loader 208 is integrated with image 100. Bodrov further confirms that loader is not integrated with image 100 by stating that a function of loader 208 is to copy image 100 from storage device 105 to memory 108. This is further confirmed in FIG. 2, which presents the program loader as part of operating system 95. Second, Bodrov's pointers do not point an application to the validator because the validator is a one-time only operation (as opposed to permanent protection provided by an access security agent), which means that Bodrov's loader merely fixes up pointers to connect the code from various executable images 100, 200.

Therefore, it is very clear that Bodrov does not teach what the Office Action argues it does and that attempting to modify Oe with Bodrov as alleged (i.e. substituting Oe's resource control RMP 203, SCM 19 for Bodrov's one-time validator/authenticator) would do absolutely nothing except produce a useless, dysfunctional mess that still fails to teach the claimed subject matter.

In addition to the foregoing, the law of obviousness prevents attempts to modify Oe with Bodrov or Rothrock to try to read on the claimed subject matter. Specifically, the rejection based on the proposed modification of Oe by Bodrov is improper because: [A] Oe teaches away from the combination/modification; [B] it would change the principle of operation of Oe; and [C] a *prima facie* rejection has not been made.

A. The combination/modification is improper because Oe teaches away from it. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir., 1994). “It is improper to combine references where the references teach away from their combination.” M.P.E.P. § 2145 X.D.2. Each “prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed subject matter.” M.P.E.P. § 2141.02 VI. “In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed subject matter as a whole would have been obvious.” M.P.E.P. § 2141.02 I.

Oe must operate independent of particular resources because its purpose to control access to a plurality of computer resources with a plurality of applications calling OS APIs. Oe indicates in paragraphs 0001, 0007 and 0217, among others, that it operates independent of the OS and resources such as files. One of ordinary skill would be discouraged by Oe from integrating RMP 203 with a particular resource. Therefore, Oe cannot be combined/modified as proposed. M.P.E.P. § 2145 X.D.2.

B. The combination/modification is improper because it would change the principle of operation of Shelton. “The proposed modification cannot change the principle of operation of a reference.” (MPEP 2143.01.VI). Oe operates to control access to a computer’s resources by monitoring, trapping and handling API calls from applications. See, e.g., FIG. 2 (2031); ¶ 0217. Even if it were somehow possible, Oe cannot be modified to read on the claimed subject matter

because to do so would change Oe's principle of operation away from controlling access by monitoring, trapping and handling API calls. Therefore, Oe cannot be combined/modified as proposed by Bodrov and other references. (MPEP 2143.01.VI).

C. A prima facie rejection has not been made. The Office Action fails to allege or explain the many details necessary to actually make a prima facie rejection. For example, what exactly is it about Oe that the Office Action proposes changing? Is it application 202, OS 201, RMP 203, file 2011? These are the sorts of details the Examiner is required to point out to make a coherent argument that Applicants can respond to. The failure to provide specificity fails to give Applicants reasonable notice as to what precisely the Examiner is arguing.

The Office Action not only fails to specify what exactly in Oe would be modified but also fails to specify how it would be modified with Bodrov. The Office Action cannot simply summarily conclude as it does that, “[t]herefore, it would have been obvious . . . to combine Bodrov with Oe.” Combine how? Combine what with what? What exact steps and/or elements is the Examiner combining, how exactly are those steps/elements combined and what exactly is the result – what does it look like and function like? None of that is explained in the Office Action. This is another fatal error.

Specifying details is not only required to give notice and an opportunity to respond, but it is also an excellent logical exercise to go through to test the rejection to make sure that patent term is not unnecessarily being wasted by inappropriate rejections. Since Oe uses an independent RMP 203 to protect independent files 2011, does it make sense to modify anything at all, let alone use something from Bodrov? The Examiner, citing Bodrov at col. 1, ll. 34-36, argues it's obvious to change something in Oe “to verify the identity of a software application in a dynamic loading environment.” This makes no sense.

Ignoring for the moment what specific component in Oe the Examiner might propose to add Bodrov's validator or loader, adding a validator to Oe to detect tampering does nothing to help Oe

disclose the claimed subject matter. Oe's RMP 203 is still independent of file 2011, application 202 and OS 201, just as Oe wants it.

The Office Action does not even make the correct inquiry. The question that arises when determining whether or not it is obvious to modify Oe is not why is it obvious to integrate Bodrov's validator with Bodrov's program loader 208 or image 100, the question is why is it obvious to modify Oe's RMP 203/SCM 19 with Bodrov, e.g., why swap it with Bodrov's validator to integrate it with Bodrov's loader or image file 100?

“The mere fact that references can be combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination.” MPEP § 2143.01 *citing In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). “A general incentive does not make obvious a particular result, nor does the existence of techniques by which those efforts can be carried out.” *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1995).

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), an Office Action has to provide reasonable proof that all of the claimed functions, elements, and steps/interrelationships are taught by the cited references, with precise citation thereto to enable a response without forcing Applicants to guess what arguments, e.g., what detailed comparisons, are being made by an Examiner.

Without providing rationale as to how a reference is being asserted against a claim, the burden to clearly articulate the rejection has not been met. “The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and other wise reply completely at the earliest opportunity.” (Emphasis added) M.P.E.P. § 706. “The pertinence of reference, if not apparent, must be clearly explained and each rejected claim specified.” (emphasis added) 37 § CFR 1.104 (c)(2), M.P.E.P. 706. To anticipate a claim, a reference must teach every claimed element. M.P.E.P. § 2131. Furthermore, the examiner bears the burden of proof to show patent invalidity. See *In re*

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Caveney, 761 F.2d 671, 674 (Fed. Cir. 1985). Such proof must amount to a preponderance of the evidence to warrant rejection of claims. *Id.*

The M.P.E.P. provides several guidelines for rejecting a claim under 35 U.S.C. 103(a). Specifically, reference is made to M.P.E.P. § 2141. III Rationales To Support Rejections Under 35 U.S.C. 103, which states in part:

“Office personnel must explain why the differences(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. ... The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396.” (Emphasis added)

Additionally, the Examiner should explain how to combine the references, per M.P.E.P. 706.02(j).

“35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action: (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation >as to< why >the claimed invention would have been obvious to< one of ordinary skill in the art at the time the invention was made**.” (Emphasis added)

It is respectfully submitted that the rejection lodged in the Office Action does not observe the foregoing principles of formulating a proper rejection under 35 U.S.C. § 103.

The arguments about Rothrock also lack merit. Like Bodrov, Rothrock adds nothing to Oe's lack of disclosure. Rothrock substitutes securely loaded functions for insecure OS functions to prevent a media player from playing unsafe content, which is plainly unlike the claimed security agent providing access control to an object model by an application in order to prevent exposure in non-obfuscated form. The claimed subject matter requires the two claimed pointers, one from application to security agent and another from the security agent to the object model. In contrast, Rothrock only redirects player calls to secure functions instead of unsecure functions. Thus, the citations to Rothrock are without merit because Rothrock's secure loader does not teach what the functionality of the claimed loader involving the two pointers to and from the security agent.

In addition, the Office Action again fails to make a *prima facie* rejection. Nowhere does the Office Action explain what in Rothrock is allegedly equivalent to the claimed first and second references relative to the claimed security agent, object model and commander/application. Moreover, nowhere does the Office Action explain how and what elements in Oe and Bodrov would be further modified by Rothrock and what the result and resulting functionality would be. The vague allegation of obviousness to combine makes absolutely no sense without a rational explanation of precisely what elements are being modified, how that would be done and what the result would be.

Therefore, because the references do not teach what the Office Action argues they do and because the law of obviousness has not been followed in multiple respects, Applicants respectfully request withdrawal of the rejection of claims 2, 4-26 and 34 based on a combination of at least Oe, Bodrov and Rothrock. The dependent claims are patentable over this combination of references for at least the same reasons as the independent claims are.

Amendments made herein as well as amendments previously made are without abandonment of subject matter. Applicant expressly reserves the right to, in the pending application or any application related thereto, reintroduce any subject matter removed from the scope of claims by any amendment and introduce any subject matter not present in current or previous claims.

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CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Reconsideration of this application and an early Notice of Allowance are requested. Applicants desire to hold a telephone interview with the Examiner and his supervisor following their review of this reply.

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